

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841952

Luminaire Tested: **ARCH4-250-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24528 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

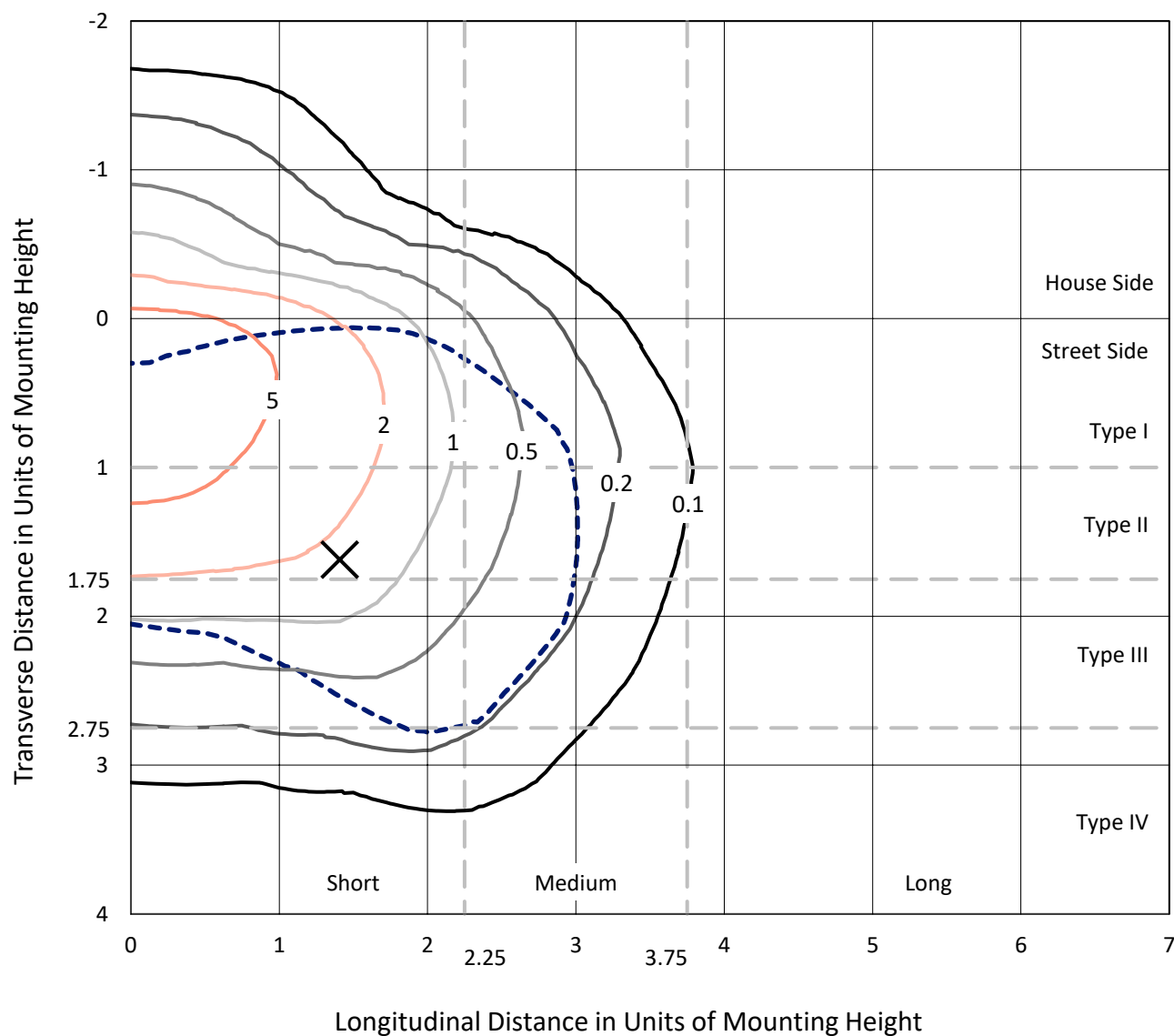
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

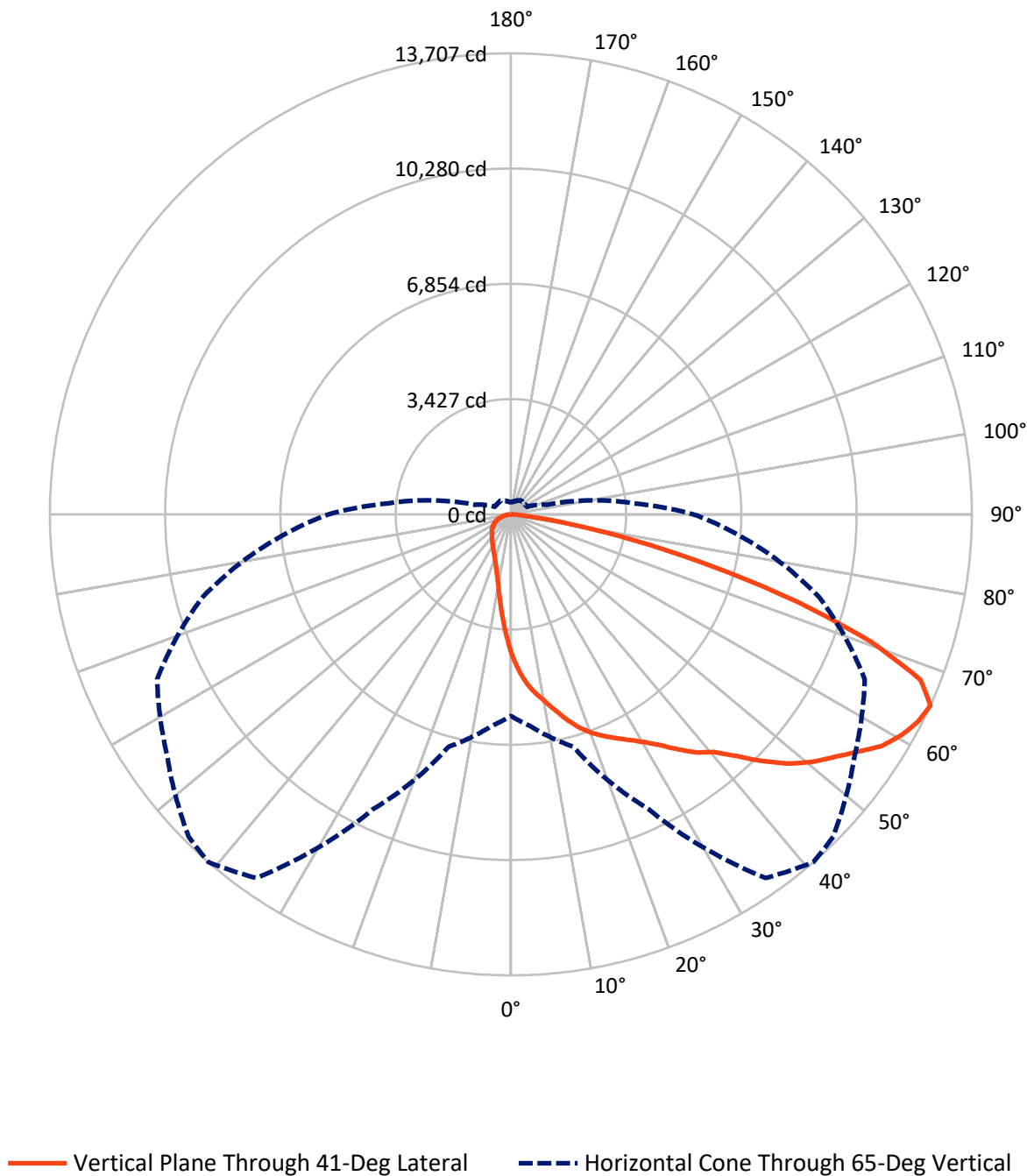
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3149.0	0.0	3149.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	21379.0	0.0	21379.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	24528.0	0.0	24528.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.4	1.6
10°-20°	1167.7	4.8
20°-30°	2008.8	8.2
30°-40°	3046.7	12.4
40°-50°	4463.5	18.2
50°-60°	5636.5	23.0
60°-70°	5285.2	21.5
70°-80°	2355.6	9.6
80°-90°	174.5	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24528.0	100.0
0°-180°	24528.0	100.0

Coefficient of Utilization



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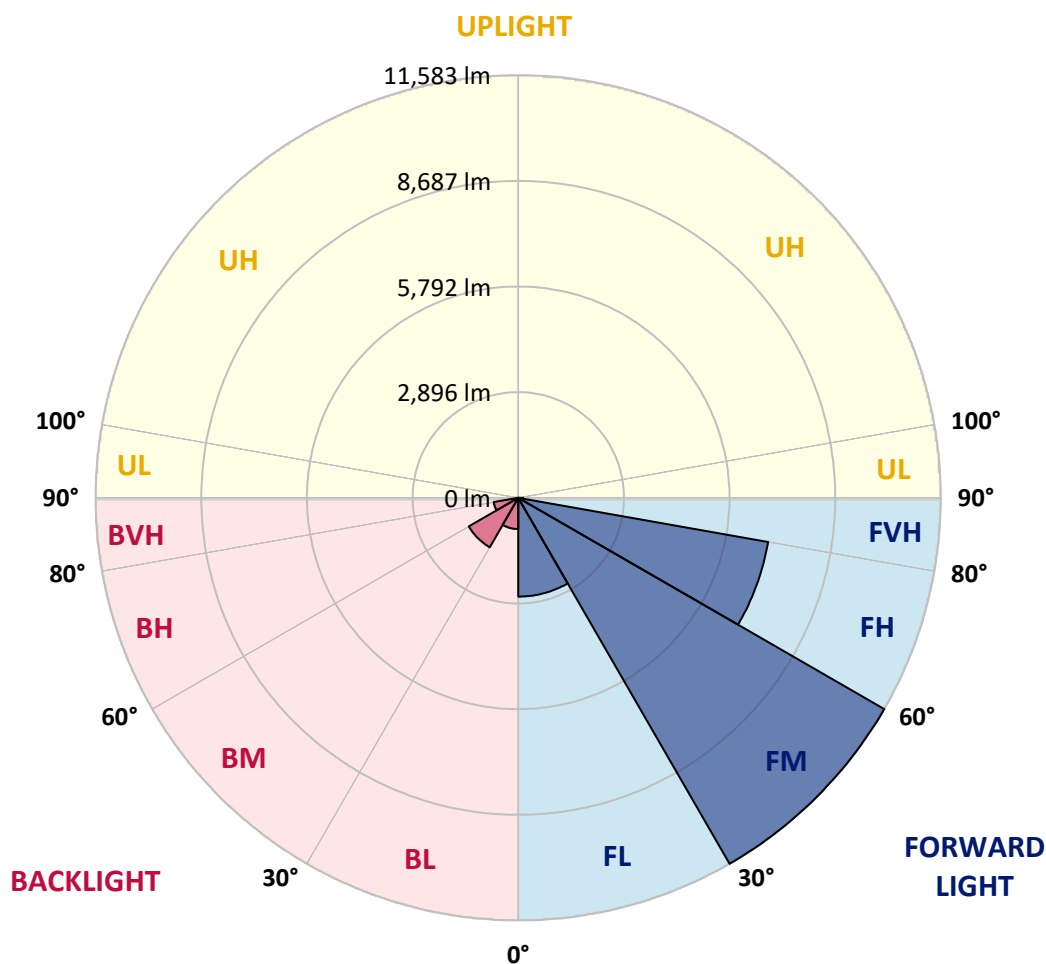
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2708.8	11.0			
FM	(30°-60°)	11583.1	47.2			
FH	(60°-80°)	6956.8	28.4			G3/7500
FVH	(80°-90°)	130.3	0.5			G2/225
BL	(0°-30°)	857.1	3.5	B2/1000		
BM	(30°-60°)	1563.6	6.4	B2/2500		
BH	(60°-80°)	684.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	44.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4
2.5°	4820.8	4805.3	4795.0	4738.1	4738.1	4660.5	4665.7	4593.2	4505.3	4365.7	4215.7
5°	5276.0	5255.3	5229.5	5172.6	5151.9	5074.3	5064.0	4960.5	4810.5	4567.4	4298.4
7.5°	5674.3	5653.6	5617.4	5534.7	5477.8	5384.7	5358.8	5224.3	5058.8	4758.8	4381.2
10°	6036.4	6020.9	5974.3	5870.9	5793.3	5679.5	5632.9	5451.9	5245.0	4913.9	4448.4
12.5°	6403.7	6383.0	6320.9	6233.0	6139.9	6005.4	5948.5	5715.7	5451.9	5084.6	4546.7
15°	6745.0	6714.0	6667.5	6574.3	6491.6	6362.3	6300.2	6026.1	5705.4	5276.0	4676.0
17.5°	6967.5	6941.6	6900.2	6848.5	6781.2	6683.0	6620.9	6351.9	5958.8	5462.2	4810.5
20°	7101.9	7091.6	7076.1	7045.1	7014.0	6946.8	6900.2	6646.8	6233.0	5643.3	4939.8
22.5°	7205.4	7195.1	7189.9	7189.9	7195.1	7169.2	7138.2	6920.9	6496.8	5834.7	5058.8
25°	7365.8	7360.6	7350.2	7339.9	7376.1	7381.3	7370.9	7220.9	6827.8	6088.1	5208.8
27.5°	7588.2	7572.7	7552.0	7541.6	7577.8	7603.7	7624.4	7520.9	7179.5	6346.8	5379.5
30°	7929.6	7883.0	7831.3	7795.1	7820.9	7862.3	7908.9	7846.8	7541.6	6667.5	5555.3
32.5°	8333.0	8276.1	8157.2	8089.9	8157.2	8188.2	8224.4	8193.4	7919.2	7014.0	5731.2
35°	8824.4	8757.2	8633.0	8534.8	8653.7	8586.5	8571.0	8539.9	8276.1	7355.4	5927.8
37.5°	9641.7	9543.4	9346.8	9129.6	9129.6	8984.8	8927.9	8834.8	8596.8	7660.6	6119.2
40°	10588.3	10459.0	10205.5	9884.8	9590.0	9289.9	9253.7	9186.5	8974.4	8012.3	6336.4
42.5°	11628.0	11379.7	11027.9	10640.0	10164.1	9822.7	9740.0	9548.6	9341.7	8369.2	6553.7
45°	12781.4	12264.2	11752.1	11555.5	10769.3	10459.0	10303.8	9957.2	9724.4	8741.7	6781.2
47.5°	12967.7	12564.2	12222.8	12191.8	11333.1	11074.5	10898.6	10402.1	10138.3	9139.9	7019.2
50°	12864.2	12621.1	12657.3	12533.2	11746.9	11576.2	11441.7	10877.9	10546.9	9522.7	7236.4
52.5°	12429.7	12564.2	12771.1	12543.5	12140.0	12000.4	11933.1	11390.0	10929.7	9874.5	7433.0
55°	11912.4	12005.6	12450.4	12729.7	12595.2	12471.1	12409.0	11984.9	11307.3	10169.3	7614.0
57.5°	11157.3	11115.9	11607.3	12698.7	13071.1	12998.7	12931.4	12569.4	11659.0	10381.4	7727.8
60°	10024.5	9936.5	10557.2	12078.0	13226.3	13340.1	13309.0	12957.3	11928.0	10376.2	7681.3
62.5°	8064.0	8281.3	9139.9	11064.1	13293.5	13583.2	13526.3	12988.3	12015.9	10076.2	7386.4
65°	5995.0	6305.4	7148.5	9667.5	13200.4	13707.3	13552.2	12481.4	11607.3	9481.3	6739.9
67.5°	4319.1	4593.2	5208.8	7955.4	12305.6	13138.3	12957.3	11653.8	10665.9	8638.2	5845.0
70°	2953.5	3150.1	3569.1	5793.3	10505.5	11359.0	11245.2	10417.6	9181.3	7634.7	4748.4
72.5°	2084.5	2167.3	2436.3	3822.5	7981.3	8912.4	8777.9	8571.0	7376.1	6346.8	3693.2
75°	1562.1	1613.8	1758.7	2472.5	5384.7	6176.1	6051.9	6170.9	5508.8	4805.3	2689.7
77.5°	589.7	641.4	998.3	1577.6	3186.3	3791.5	3667.4	3739.8	3062.2	2425.9	1339.7
80°	160.3	170.7	331.0	750.0	1448.3	1888.0	1717.3	1474.2	1138.0	1117.3	708.6
82.5°	67.2	77.6	150.0	403.5	517.3	517.3	434.5	537.9	434.5	522.4	341.4
85°	25.9	31.0	36.2	103.5	67.2	72.4	77.6	103.5	87.9	108.6	77.6
87.5°	0.0	0.0	0.0	5.2	5.2	10.3	5.2	10.3	15.5	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4	4179.4
2.5°	4153.6	4096.7	4013.9	3879.4	3739.8	3662.2	3563.9	3548.4	3444.9	3434.6	3393.2
5°	4179.4	4060.5	3848.4	3589.8	3336.3	3139.8	2994.9	2917.3	2767.3	2767.3	2725.9
7.5°	4200.1	4013.9	3672.5	3289.8	2943.2	2679.4	2482.8	2400.1	2265.6	2255.2	2224.2
10°	4205.3	3957.0	3481.1	2984.6	2560.4	2291.5	2100.1	2007.0	1888.0	1877.6	1857.0
12.5°	4246.7	3926.0	3310.4	2720.8	2286.3	1996.6	1810.4	1732.8	1639.7	1629.4	1608.7
15°	4313.9	3926.0	3165.6	2498.4	2043.2	1774.2	1613.8	1541.4	1474.2	1463.8	1453.5
17.5°	4381.2	3915.6	3020.8	2291.5	1841.4	1598.3	1458.7	1401.8	1350.0	1344.9	1334.5
20°	4443.2	3910.5	2876.0	2115.6	1686.3	1453.5	1344.9	1293.1	1251.8	1251.8	1246.6
22.5°	4505.3	3900.1	2736.3	1950.1	1551.8	1344.9	1251.8	1194.9	1163.8	1163.8	1158.7
25°	4598.4	3900.1	2607.0	1810.4	1443.1	1262.1	1169.0	1127.6	1101.8	1096.6	1096.6
27.5°	4707.0	3931.2	2493.2	1686.3	1350.0	1179.3	1106.9	1065.6	1034.5	1024.2	1029.3
30°	4826.0	3957.0	2389.7	1577.6	1262.1	1117.3	1039.7	998.3	967.3	956.9	962.1
32.5°	4945.0	3988.1	2296.6	1479.4	1174.2	1060.4	982.8	936.2	905.2	900.0	900.0
35°	5074.3	4019.1	2203.5	1396.6	1101.8	1003.5	931.1	879.3	858.6	848.3	853.5
37.5°	5203.6	4070.8	2115.6	1319.0	1050.0	951.8	884.5	832.8	817.3	812.1	812.1
40°	5358.8	4148.4	2079.4	1267.3	1003.5	905.2	848.3	796.6	781.1	781.1	781.1
42.5°	5488.1	4210.5	2048.3	1210.4	967.3	863.8	812.1	770.7	760.4	755.2	760.4
45°	5617.4	4267.4	2007.0	1158.7	920.7	822.4	781.1	739.7	729.3	729.3	729.3
47.5°	5746.7	4298.4	1950.1	1106.9	879.3	786.2	750.0	713.8	703.5	703.5	703.5
50°	5850.2	4324.3	1867.3	1050.0	832.8	755.2	719.0	682.8	672.4	672.4	672.4
52.5°	5953.6	4329.4	1779.4	982.8	786.2	719.0	688.0	651.7	641.4	636.2	636.2
55°	6046.7	4324.3	1675.9	905.2	734.5	677.6	651.7	620.7	600.0	579.3	589.7
57.5°	6114.0	4319.1	1556.9	827.6	682.8	636.2	625.9	584.5	543.1	491.4	501.7
60°	6088.1	4262.2	1427.6	729.3	625.9	594.8	594.8	537.9	465.5	439.7	444.8
62.5°	5922.6	4101.9	1293.1	625.9	569.0	553.5	548.3	486.2	429.3	403.5	408.6
65°	5426.0	3698.4	1096.6	532.8	512.1	506.9	506.9	450.0	398.3	367.3	372.4
67.5°	4670.8	3103.5	894.9	450.0	455.2	465.5	465.5	413.8	362.1	331.0	336.2
70°	3744.9	2425.9	713.8	387.9	393.1	408.6	419.0	372.4	325.9	294.8	294.8
72.5°	2819.1	1841.4	574.2	325.9	351.7	351.7	367.3	331.0	284.5	253.5	258.6
75°	2043.2	1319.0	455.2	274.1	305.2	300.0	300.0	279.3	243.1	222.4	222.4
77.5°	967.3	693.1	362.1	196.6	237.9	232.8	237.9	222.4	206.9	186.2	191.4
80°	475.9	341.4	232.8	139.7	165.5	170.7	186.2	175.9	170.7	155.2	155.2
82.5°	227.6	134.5	108.6	98.3	113.8	119.0	129.3	129.3	134.5	124.1	124.1
85°	62.1	36.2	46.6	62.1	72.4	77.6	87.9	93.1	93.1	87.9	93.1
87.5°	15.5	15.5	20.7	31.0	36.2	41.4	46.6	46.6	20.7	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)